## REMARKS

In the Office Action mailed June 24, 2009, the Examiner withdrew the previous indicated allowability of claims 6-9 and 12-14. Claims 1-9 and 11-15 were rejected by the Examiner and claim 10 was objected to but indicated to be allowable if rewritten in independent form to include the limitations of the base claim and any intermediate claim on which claim 10 depends. The Examiner is thanked for the favorable disposition with regard to claim 10. No claims are amended in this response.

## I. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

The Examiner rejected claims 1-9 and 11-15 as obvious under 35 U.S.C. § 103(a). The Examiner cited US Patent No. 7,186,377 to *Iyama et al.* (*Iyama et al.*) in view of US Patent Publication No. 2002/0160717 to *Persson et al.*(*Persson et al.*) as the basis for this rejection.

Applicants' invention, as set forth in claim 1, is directed to a device for controlling the specific absorption rate of mass-produced radiant objects. The device has a test zone for the mass-produced radiant objects (objects are situated at the level of the test zone) and a sensor disposed in a waveguide with an opening that is opposite to the test zone.

The Examiner contends that *Iyama et al.* describes a device for controlling the specific absorption rate of mass-produced radiant objects. *Iyama et al.* expressly describes at least one sensor (1) disposed in a phantom (2) for measuring power radiated by an object (3) situated adjacent the phantom. *Iyama et al.* describes at least one processing unit (80) which analyzes the power thus measured. *Iyama et al.* expressly requires that the sensor is disposed in a phantom (2) with an opening (21) opposite the object. *Iyama et al.* teach that this placement is required because the phantom is configured to simulate absorption of the radiation by the human body. Col. 3,

ll. 26-51 of *Iyama et al.* The Examiner concedes that *Iyama et al.* is silent with regard to the use of a waveguide. However, the Examiner contends that it would have been obvious to incorporate the teaching of *Persson et al.* into the teaching of *Iyama et al.* for decreasing processing time in order to reduce manufacture costs. The Examiner is completely silent on what would bring the skilled person to replace the opening in the phantom in *Iyama et al.* in which the sensor is placed with a waveguide, or why the objective articulated by the Examiner makes this substitution obvious.

Specifically, *Iyama et al.*'s opening does not invite substitution with a waveguide. In *Iyama et al.* the opening is surrounded by the phantom. In those embodiments where the phantom is a liquid, the opening is made of the same material as the phantom vessel shell. Col. 8, ll. 24-30. In fact, the only mention of a tube in *Iyama et al.* is in the context of shields for the transmission of radiation. Col. 16, ll. 13-27:

> When the scan mechanism is constructed with the belt conveyor 31, a pair of opposing walls of the radio anechoic box 41 are formed with openings 41a, 41b in opposing relationship so as to pass the belt conveyor 31 therethrough, and metal tubes 42a, 42b are mounted to connect with the openings 41a, 41b, as shown in FIG. 33. *The openings of the tubes 42a, 42b are chosen so that their cut-off frequency is higher than the frequency of the radio wave radiated from the radio transmitter 3 within the radio anechoic box 41, thus preventing the radio wave from the radio transmitter 3 from passing through the tubes 42a, 42b.* Alternatively, cloths 43a, 43b woven with metal are attached to the upper edges of the openings 41a, 41b of the radio anechoic box 41 to hang therefrom, as shown in FIG. 34, thus causing the cloths 43a, 43b to be forced out of the way by the radio transmitter 3 as it passes through the openings 41a, 41b. (emphasis added).

Given that these tubes function as shields, the skilled person would not substitute a waveguide for the shields. Note that *Iyama et al.* does not provide a tube material. Conventional tube materials are such that many tube materials

themselves preclude the tube's use as a waveguide by virtue of the inadequate electromagnetic impedance with air, which would cause the electromagnetic waves to fade out.

Specifically, in *Iyama et al.* opening (21) is described as a probe insertion opening (2). This opening extends from a location close to the surface of the phantom to an opposite opening end. Column 8, lines 23-30. Probe (1) is then inserted inside the opening (21) and disposed close to the surface of the phantom away from the opening. The probe is affixed in the tube by adhesive. Col. 7, ll. 61-63. The purpose of this configuration is to place probe (1) in the vicinity of the radiant object as the latter is positioned immediately opposite probe (1). *See* FIG. 5.

There is no need of a waveguide in *Iyama et al.*, since a waveguide is used when probe and radiant object are placed a distance from each other. Referring to page 6, lines 34-38 of the specification, that embodiment describes placing the waveguide 7 at a distance "fairly close" to the antennas of the portable telephones. The waveguide (7) opening faces the object. *See* FIG. 3 of the specification.

In contrast, in *Iyama et al.*, the opening (21) is not placed opposite the test zone, but rather away from the test zone. *See* FIG. 7B of *Iyama et al.* This is not surprising since the hollowed out portion of the phantom in *Iyama et al.* is not a waveguide. There is therefore no need to position the opening of the hollowed out portion opposite the object. This is because *Iyama et al.* does not contemplate guiding a wave up to the probe from the device side of the sensor. The Examiner, without further explanation concludes that the skilled person would modify *Iyama et al.* by substituting a waveguide (as per *Persson et al.*) for the phantom opening according to "for decreasing processing time in order to reduce manufacturing costs." Applicants are at a loss to understand how such a

significant structural and functional modification of the phantom opening in *Iyama et al.* is obvious from *Persson et al.* or the general knowledge of the skilled portion.

Certainly *Persson et al.* does not provide the skilled person with information that would suggest the substitution of the phantom opening in *Iyama et al.* with a waveguide open to the object and with sensor disposed therein as recited in claim 1. In *Persson et al.*, the term waveguide is used to describe a shielded pathway through which radiant objects (mobile telephones) are conveyed through the analysis chamber. *See, e.g.* paragraph [0092] of *Persson et al.*:

> Electronic devices continuously or discontinuously flow into the mode-stirred chamber 201 through the waveguide 204, through the mode-stirred chamber 201, and finally out through the **waveguide 205**. During the period the electronic devices are inside the mode-stirred chamber 201, simultaneous testing and/or simultaneous software downloading takes place for the electronic devices. **The physical dimensions of the waveguides 204, 205 are defined in order to get a cut off frequency above the highest radiation frequency used inside the mode-stirred chamber 201. The waveguides 204, 205 therefore efficiently shield against radiation to the outside of the mode-stirred chamber 201.**

Thus, in the context of *Persson et al.* a waveguide is no more than a conduit for the devices being tested and a mechanism for keeping the radiation used for testing in the conduit. In this regard it is not unlike the shield tube of *Iyama et al.* It is not a mechanism for directing waves to a targeted location (*i.e.* sensors disposed in the waveguide). In the present invention, the term "waveguide" has the more conventional meaning of a device for guiding waves from a point in space to another via a path that some of the waves would not have followed but for the waveguide.

Broken down, the Examiner's rejection amounts to a hindsight reconstruction of various elements from various

disparate references, which is not permitted under *KSR International Co. v. Teleflex Inc.* 550 U.S. 398, 82 U.S.P.Q.2d 1385 (2007). "A fact finder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning." *KSR*, 550 U.S. at 421, 82 U.S.P.Q.2d at 1397. The person of ordinary skill in the art, reading *Iyama et al.* in view of *Persson et al.* would not find it obvious to incorporate a waveguide into *Iyama et al.'s* phantom, with opening opposite the radiant object, to guide waves to a sensor disposed therein.

For these reasons, the device of claim 1 is not obvious under 35 USC § 103(a) based on *Iyama et al.* in view of *Persson et al.*

The Examiner also rejected claims 2-9 and 10-15 as obvious for the aforesaid reasons. The reasons why these claims are not obvious in view of the cited references are the same as the reasons why claim 1 is not obvious and these reasons are not restated in their entirety. With regard to claims 5 and 6 specifically, *Iyama et al.* does not describe a device with a waveguide and therefore does not teach a waveguide with the configurations recited in these claims. The phantom opening in *Iyama et al.* may be cylindrical, but it is not a waveguide.

Therefore, the Examiner is respectfully requested to withdraw his rejection of claims 1-9, and 11-15 as obvious based on *Iyama et al.* in view of *Persson et al.*

The Examiner rejected claims 7-9 as obvious under 35 USC § 103(a) citing *Iyama et al.* in view of *Persson et al* and further in view of US Patent No. 6,211,750 to Gould ("*Gould*"). The Examiner contends that *Gould* teaches two orthogonal probes which run insides the waveguide (12); two pairs of orthogonal probes for deviometric processing where the two probes are linked to a deviometry means for improving the polarity of the

waveguide in order to decrease processing time and reduce manufacture cost.

Claims 7-9 recite probe configurations within the waveguide and their use in conjunction with a deviometry means. The Examiner contends that *Gould* teaches these aspects of claims 7-9 and it would be obvious for the skilled person to combine these aspects of *Gould* with *Iyama et al.* and *Persson et al.* As noted above, *Iyama et al.* in view of *Persson et al.* does not render obvious the disposition of a sensor in a waveguide with an opening opposite a radiant object for measuring the power irradiated therefrom. The *Gould* probes are used to excite the primary coaxial waveguide mode, while suppressing the excitation of the TEM or coaxial mode. *Gould* at col. 4, ll. 20-50. Consequently, the *Gould* probes are emitters.

In contrast, the probes recited in claims 7-9 are receivers. *See* page 7, lines 1-7 of Applicants' specification. The claimed probes are used for measurement in a sensor. Again the substitution that the Examiner seeks to make by his rejection is based upon a complete hindsight reconstruction of Applicants' claims rather than a combination the skilled person would make based upon the cited references and the general skill and knowledge of the skilled person. The Examiner is respectfully requested to withdraw his rejections of claims 7-9 as obvious under 35 USC § 103(a).

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he/she telephone Applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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